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# A NEW SPECIES OF HUNTEROTREMA (DIGENEA: CAMPULIDAE) FROM THE AMAZON RIVER DOLPHIN (INIA GEOFFRENSIS)

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ABSTRACT: A new species of *Hunterotrema* (Digenea: Campulidae) is described from the lungs of the Amazon river dolphin (*Inia geoffrensis*). It differs from the single species in this genus, *H. caballeroi*, in body size, the lack of cuticular spines, placement of genital pore, and size of cirrus sac.

During investigations on marine mammal helminths, numerous lung trematodes taken from the Amazon river dolphin (Inia geoffrensis) were given to me for identification by Dr. Sam Ridgway, Naval Undersea Research and Development Center. Point Mugu, California. The specimens were found to be similar to, but much larger than, Hunterotrema caballeroi McIntosh 1960. McIntosh (1960) described H, caballeroi from 3 entire worms and 2 fragments of 2 additional specimens. The type material and additional specimens were obtained on loan from the USNM Helminth Collection, Beltsville, Maryland. A comparison of those 6 specimens not designated as part of the type-series (USNM Helm. Coll. Nos. 56921, 56922) with this material indicated a similarity between these forms. Both groups differed from H. caballeroi sufficiently to warrant a new species description.

The worms from Dr. Ridgway had been fixed in 10% formalin, whereas, those received from Belts-

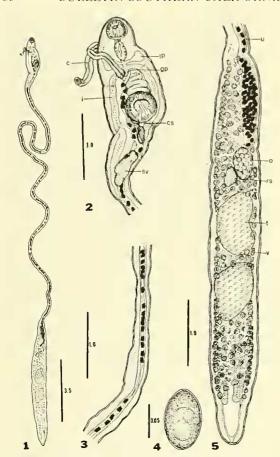
ville were in 70% ethanol. Whole mounts were stained in Semichon's carmine or celestine blue B. dehydrated in ethanol, cleared in xylene and mounted in piccolyte. Drawings were made with the aid of a drawing tube. All measurements are given in millimeters unless otherwise stated. Average measurements are presented with ranges in parentheses.

# Hunterotrema macrosoma, new species Figures 1-5

Description based on measurements from 15 specimens.

Diagnosis: Body slender, elongate, 31 (24-36) long, with distinct forebody 3.7 (3.1-4.7), mid-body 19.6 (12.2-25.4) and hindbody 7.8 (6.0-9.8). Maximum body width 1.1 (0.74-1.46) at acetabular level, hindbody 1.0 (0.53-1.5) in region anterior testis.

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Figures 1-5. Hunterotrema macrosoma, new species. Fig. 1. Ventral view of entire worm. Fig. 2. Forebody. Fig. 3. Mid-body. Fig. 4. Egg. Fig. 5. Hindbody. Abbreviations: c—cirrus; cs—cirrus sac; gp—genital pore; i—intestinal ceca; lp—lateral pockets of esophagus; o—ovary; rs—receptaculum seminis; sv—seminal vesicle; t—testis; u—uterus; v—vitellaria.

Spines lacking. Oral sucker, well developed, circular and subterminal 0.34 (0.30-0.40) in diameter. Prepharynx short, pharynx 0.32 (0.30-0.36) long by 0.19 (0.17-0.24) wide. Esophagus expanded anteriorly into two lateral pockets, 0.35 long (from midesophagus) by approximately 0.20 wide at ends (variable). Acetabulum, well developed, circular, 0.58 (0.50-0.67) in diameter. Cirrus long, unarmed. Cirrus sac 2.0 (1.8-2.1) long by 0.52 (0.43-0.60) wide, extending less than half its length posterior to acetabulum. Ovary oval, just cephalad to anterior testis, 0.33 (0.28-0.46) long by 0.35 (0.30-0.50) wide. Receptaculum seminis large, lateral to ovary. Seminal vesicle large, genital pore anterior to acetabulum just posterior to cecal bifurcation. Testes confined to median and posterior half of hindbody. Anterior testis 0.92 (0.65-1.15) long by 0.69 (0.48-0.98) wide. Posterior testis 1.03 (0.75-1.29) long by 0.71 (0.52-0.88) wide. Vitellaria, uniformly distributed, confined to hindbody,

extending from posterior end of intestinal cecae to anterior constriction of hindbody. Uterus coiled immediately anterior to ovary, then straightens to run as a sinuous tube to genital pore. Eggs oval  $108\mu$  (105-112) by  $62\mu$  (58-66).

*Host: Inia geoffrensis Location:* Lungs

Locality: Amazon river basin, Leticia, Columbia and Iquitoz, Peru.

*Holotype and Paratypes:* USNM Helm. Coll. Nos. 71583 (holotype), 71584, 56921, 56922.

### DISCUSSION

Currently the genus *Hunterotrema* is represented by a single species, *H. caballeroi* McIntosh, 1960. *Hunterotrema macrosoma* differs from *H. caballeroi* in the following characters: (1) length and width of body (*H. caballeroi* 13.07 long by 1.64 maximum width); (2) lack of cuticular spines (*H. caballeroi* heavily spined from anterior to region of reproductive organs); (3) placement of genital pore (immediately anterior to acetabulum in *H. caballeroi*); (4) cirrus sac not extending more than half its length posterior to acetabulum as in *H. caballeroi*.

Since both familiar (Campulidae Odhner, 1926) and generic diagnosis included the presence of spines, an emendation to both is proposed to include *H. macrosoma* and should read "Cuticular spines present, or lacking."

Woodard *et al.*, (1969) described the pathology of pulmonary trematodiasis in an Amazon river dolphin from Iquitoz, Peru. The photograph and measurement (printed, in error, as "approximately 250 mm in length" but corrected by Dr. Stephen Zam, University of Florida [pers. comm.] to be 25 mm) indicates the trematodes involved in the report were *H. macrosoma*, not *H. caballeroi*.

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